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UNITED STATES GOVERNMENT

memorandum

DATE: May 16, 1989

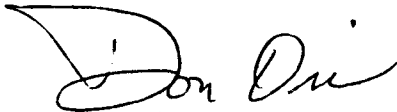
REPLY TO
ATTN OF: Migratory Bird Field Coordinator, Memphis, TN

SUBJECT: Preliminary Project Investigation for Expansion of Holla
Bend NWR, Arkansas

TO: Chief, Wildlife & Habitat Management Division, Refuges &
Wildlife, FWS, Atlanta, GA (ARW/WHM)

Attached is the subject document as requested. I have also enclosed an unedited video tape of the area which should give you a good idea of what the proposed area and the existing refuge look like.

If you have any questions, please advise.



attachment

enclosure: one video tape

"A Safety Check May Save Your Neck"

**Preliminary Project Investigation
Holla Bend National Wildlife Refuge
Yell County, Arkansas**

**Prepared by: Migratory Bird Field Coordinator
 U.S. Fish and Wildlife Service
 Memphis, Tennessee**

May, 1989

INTRODUCTION

An expansion of the Holla Bend National Wildlife Refuge (NWR) is being proposed to increase the quantity and quality of wintering habitat primarily for mallards and Canada geese. This action will contribute to the goals and objectives outlined in the North American Waterfowl Management Plan (NAWMP) by: (1) increasing the quantity and quality of food grown and made available to waterfowl, and (2) create an effective rest area.

Location and Size

The proposed acquisition includes 2,420 acres on the south side of the Arkansas River in Yell County of western Arkansas. All properties are adjacent to the existing refuge as outlined in green on the attached map. This is the only NWR in western Arkansas and the nearest NWR is Cache River some 100 miles east of Holla Bend.

Description of Habitat

The proposed acquisition which, includes about half of the old river oxbow, is composed of the following habitat types:

<u>Habitat Type</u>	<u>Estimated Acreage</u>	<u>Percent</u>
open water	420	18
willow/cottonwood	490	20
mixed hardwoods	410	17
cropland	910	38
pasture	180	7
<hr/> TOTAL	<hr/> 2,420	<hr/> 100

The cottonwood/willow habitat is located in low areas and adjacent to existing open water. A portion of this type could be classified as wooded swamp.

Along the high bank and other higher elevations mixed hardwood occur. The species include pecan, walnut, ash and some oak.

Soybeans and wheat are the primary crops grown on the agricultural land.

Periodically the Arkansas River backs into the old oxbow bend bordering the refuge and floods the cottonwood/willow habitat. When this occurs during the winter the waterfowl habitat is improved.

Major Wildlife Values

The old oxbow and adjacent wooded wetlands provide ideal wood duck breeding habitat and is the principle rest area for waterfowl that utilize the refuge. Since 1972, the peak mallard population has ranged from a low of 5,000 in 1988 to a high of 70,000 in 1983. Snow goose and Canada goose populations appear to be increasing. Historic waterfowl populations are shown in the following table:

Average Peak Waterfowl Populations
on Holla Bend NWR 1959-1988 (000's)

	<u>Mallards</u>	<u>All Ducks</u>	<u>Canada Geese</u>	<u>Snow Geese</u>
1959-63	N/A	64.8	0.7	0.6
1964-68	N/A	122.9	3.9	0.3
1969-73	N/A	71.6	2.2	0.8
1974-78	35.4	39.3	3.3	1.1
1979-83	40.0	45.3	6.7	6.3
1984-88	16.1	19.8	7.1	6.4

N/A = not available

It should be noted that the Holla Bend waterfowl populations utilize both the refuge and the adjacent lands that are proposed for acquisition.

Many shorebirds utilize the old oxbow and other open water areas. Marsh and wading birds are common in the open areas when standing water occurs. Several raptors occur in the wooded sloughs and timbered areas as well as agricultural land during portions of the year. Songbirds are common with over 150 species occurring in all habitat types.

It is estimated that the alligator population once numbered around 75; but a freeze in 1987 seems to have killed all the gators. They were found most often in the old river oxbow.

The endangered bald eagle wintering population peaks at over 50 birds in January and February. No eagle nesting attempts have occurred. Ospreys are also both summer and winter residents.

The primary game animals are white-tailed deer, squirrels, raccoons, rabbits and wild turkeys. Many furbearers also occur on the area.

Related Resource

The 5,668 Holla Bend NWR lies adjacent to the 2,420 acre proposed expansion and is managed primarily for ducks and geese.

Within 10 miles of the refuge the State of Arkansas manages the 65,000 acre Petit Jean Wildlife Management Area (WMA), primarily for big game and small game. Some 3,000 acres are

managed for waterfowl, but use is sporadic and populations are usually quite low. The state also manages the Galla Creek WMA just across the Arkansas River from Holla Bend. This area is around 2,000 acres and primarily a deer and turkey area. There is some green-tree reservoir management for ducks but populations are low.

There is presently a proposal to purchase a 2,000 to 3,000 acre area known as Blackwell Bottoms which is located some 15 miles east of Holla Bend. I believe this is a project of the Arkansas Game and Fish Commission. This area has had high historical waterfowl use and is ideal habitat for intensive management.

Threats

There are no known threats to the habitat proposed for acquisition. If Holla Bend is to improve its waterfowl management program, it will be necessary to acquire in fee-title or easements the 2,420 acres. There are no other options available that are adjacent to the refuge.

Justification

The NAWMP calls for increasing the carrying capacities on existing NWR's. Acquiring the proposed acreage is about the only

option available to Holla Bend NWR that is adjacent to the refuge. It is estimated that the principle benefits of this acquisition to waterfowl would be as follows:

<u>Section</u>	<u>Total Acres</u>	<u>Additional Acres Food</u>	<u>Additional Acres of Manageable Water</u>	<u>Other</u>
Long Lake	1,160	200	200	sanctuary
Luther Lake	140	25	25	sanctuary
South Buffer	540	---	---	primarily sanctuary
Levee Lake	580	200	200	sanctuary
TOTAL	2,420	425	425	

Increasing the amount of food by 425 acres that can also be flooded would more than double the capacity of the existing refuge.

In 1958, the Secretary of Interior issued a closing order which prohibited waterfowl hunting in the old river oxbow. This order did not, however, preclude fishing and other forms of public use. The old oxbow is the primary resting area for waterfowl using the refuge but its effectiveness is greatly reduced by disturbance. Acquiring the proposed properties will make the oxbow an effective rest area and should encourage additional waterfowl use of the refuge.

Funding could be achieved through the Migratory Bird Conservation Account, Land and Water Conservation Account or the inholding funding source.

Initial and Annual Costs

Estimated acquisition costs is \$500 per acre for a total of \$1,210,000. Annual revenue sharing cost is estimated at \$3,000. Adding this property to the existing refuge would require no additional FTE's. An additional \$15,000 for annual O&M would be required.

Ownership and Type of Acquisition

There are 28 different ownerships involved in the proposed acquisition with the smallest being a 3 acre lot and the largest 280 acres.

Acquisition by donation, partial donation or purchase of easements will be considered, however, it is anticipated that fee-simple purchases will be the probable method of acquisition.

Contaminants and Hazardous Waste

Agricultural runoff could cause minor problems with pesticides and siltation, however, proper land use management

would alleviate such potential problems. There are no known land fills or hazardous waste dumps within the selected area.

Public Attitude and Involvement

It is known that there are several willing-sellers; but there will, no doubt, be some unwilling sellers. All of these owners were advised in the 1970's that the FWS was planning to condemn their property. It will be no surprise, therefore, that we have an interest in their holdings. The attitude of the general public is expected to be favorable.

Other Considerations

It is my opinion that acquiring the proposed 2,420 acres will greatly improve the refuges ability to provide quality wintering habitat for waterfowl. Whether or not waterfowl numbers will increase in response to improved habitat is unknown. The existing refuge is certainly not the type of habitat we would choose for waterfowl management activities due primarily to the very poor and sandy soils, lack of water management capability and lack of an effective rest area.

There are additional potential acquisition sites with very good management capabilities located near Holla Bend. On the attached map I have outlined in yellow the 2,230 acre Cotton Town

bottom area and the 2,300 acre Carden bottom area. The following table provides some information on these sites:

<u>Area</u>	<u>Total Acres</u>	<u>Estimated</u>			<u>Distance From Refuge</u>
		<u>Acres Wooded Swamp</u>	<u>Acres Rice Land</u>	<u>Acres Bean Land</u>	
Cotton Town	2,230	830	1,200	200	2 miles
Carden	2,300	360	200	1,700	3 miles

The Carden Bottom site has a history of high waterfowl use. This may be due to hunters holding water on the property during the winter months. It is a well known hunting area.

I believe the Cotton Town bottom would equal or exceed the Carden bottom area in waterfowl use, if water were held on rice stubble during the winter. The fact that there is a significant amount of rice land on this tract makes it attractive for waterfowl management.

Both tracts have water management capability by blocking the culverts which drain water from the property through the levee and into the Petit Jean River. Either of these tracts offer more waterfowl management potential than the existing refuge.

I would suggest that the Service talk with the owners of these two tracts to see if we can work out a lease or partners

program on some of the property to manage winter water. This might provide an opportunity to test these areas for waterfowl response in case we might have an interest in acquiring one of the tracts in the future.

Outlined in blue on the attached map is a 350 acre area where a partners project might work well. I would also suggest that the Service pursue this possibility.

In summary, I believe we should pursue acquiring the 2,420 acres adjacent to the existing refuge. If after acquisition, development and management, we do not get a satisfactory waterfowl response, consideration should be given to acquiring the Cotton Town or the Carden bottom sites. The results of a partners or lease program on both these tracts now should provide us with a good indication of which tract might best serve our waterfowl management program.